

Configuration

Configuring the ESG publishing system

The ESG publishing scripts are implemented in the python *publish* package. The Lib subdirectory contains two configuration files:

- `__init__.py` – imports the configuration file
- `<project>_config.py` – the configuration file for `<project>`

For example, if `__init__.py` contains:

```
"""
Define the site-specific configuration for ESG publishing
"""
import clamp_config as config
```

then the configuration file is `clamp_config.py`:

```
"C-LAMP site configuration for publishing"

import os, string, glob, base_config

SUBM = 0
FREQ = 1

# Root data directory
rootdir = '/data2/cces/clamp'

# Database user ID
datauser = 'someuser'
datasocket = '/var/lib/mysql/mysql.sock'

# Project ID
projectID = 'C-LAMP'

# Service ID
service = 'DISKatORNL'

# List of models, each line of the form: model_id, url, model_description
modelListLocation = "/data1/esg/etc/models.txt"

# Top-level web directory
webroot = "/var/www/html"

# THREDDS URL
threddsroot = "http://esg2.ornl.gov/metadata/pcmdi/c-lamp/thredds/"

# THREDDS web directory
fileroot = os.path.join(webroot, "metadata/pcmdi/c-lamp/thredds/")

# RLS server URL
rlsServer = 'rls://esg2.ornl.gov'

# Ogsa-dai URL
ogsaUri = 'http://esg2.ornl.gov:8080/ogsa/services/ogsadai/DAIServiceGroupRegistry'

# Authority for parameter names
authority = "C-LAMP"

# Variables that should be ignored on file scans
```

```

excludeVars = base_config.excludeVars + [
    'bounds_latrof',
    'bounds_lonrof',
    'latrof_bnds',
    'lonrof_bnds',
]

# Common root of all object IDs in the system
datasetroot = 'pcmdi.c-lamp'

# Model URL
defaultModelUrl = "http://climate.ornl.gov/bgcmip"

# Default root publishing directory
defaultRootPublishingDir = "/data1/esg/publishing"

# Top level data directory
topDataDir = rootdir

# Project ID for CatalogGenerator config files
catalogProjectId = "C-LAMP"

# Project name
catalogProjectName = "CCSM Carbon LAnd Model intercomparison Project (C-LAMP)"

# Project URL
catalogProjectUrl = "http://climate.ornl.gov/bgcmip/"

# Project title
catalogProjectTitle = "CCSM Carbon LAnd Model intercomparison Project (C-LAMP)"

# Map table ID => (submodel, frequency)
tables = {
    'T1':('atm', 'MA'),
    'T2':('lnd', 'MH')
}

# Map (submodel, frequency) => table ID
tabtable = {
    ('atm', 'MA'):'T1',
    ('lnd', 'MH'):'T2'
}

# Map experiment description => experiment ID
exps = {
    'i01.01' : 'i01.01',
    'Spin-up, Forcing with observed NCEP/NCAR reanalysis (CCSM3 I-configuration)' : 'i01.01',
    'i01.02' : 'i01.02',
    'Control, Forcing with observed NCEP/NCAR reanalysis (CCSM3 I-configuration)' : 'i01.02',
}

# Map experiment ID => experiment descriptions
expdes = {
    'i01.01':('Spin-up, Forcing with observed NCEP/NCAR reanalysis (CCSM3 I-configuration)', 'i01.01'),
    'i01.02':('Control, Forcing with observed NCEP/NCAR reanalysis (CCSM3 I-configuration)', 'i01.02')
}

# Map frequency => frequency ID
shortfreq = {
    'monthly': 'MA',
    'monthly_by_hour': 'MH',
}

# Map frequency ID => frequency

```

```
longfreq = {
    'MA' : 'monthly',
    'MH' : 'monthly_by_hour',
}
```

...

To install the publish package, including configuration:

```
% set path = (<PYTHONHOME>/bin $path)
% cd publish-<version>
% python setup.py --verbose install
```

The following Python packages are required by the publishing scripts:

- pxdom.py
- PyXML
- MySQLdb

These packages are installed separately. The sources are in <ESGHOME>/src.